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ABSTRACT

This syllabus for an 11-unit course of instruction is designed to prepare effective junior college teachers, counselors, and administrators, though its content can be generalized to all institutions concerned with systematic approaches to instruction. The specification of instructional objectives in terms of observable (and thus evaluable) student behavior, the use of effective instructional techniques, the emphasis on teacher responsibility for facilitating and encouraging student learning, and the ability to develop a self-instructional unit are among its fundamental considerations. Also included is a list of current resource materials, reflecting the firm grounding of this syllabus in the learning theories of Benjamin S. Bloom and Robert M. Gagne. (JO)

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# SYLLABUS

# EDUCATION 360

# INSTRUCTIONAL STRATEGIES

Barton R. Herrscher

Department of Education

Duke University

Spring 1970

JC 700 116

UNIVERSITY OF CALIF.
LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

TABLE OF CONTENTS


| | | | Page |
|---|---|---|---|
| INTRODUCTION | | | 3 |
| GENERAL INFORMATION | | | 5 |
| GLOSSARY | | | 6 |
| LONG RANGE OBJECTIVES | | | 8 |
| UNIT | I. | A Systematic Approach to Instruction | 9 |
| | II. | Building the Self-Instructional Unit | 11 |
| | III. | The Two-Year College: An Overview | 13 |
| | IV. | Learning for Mastery | 16 |
| | V. | Teaching and Learning in the Two-Year College | 17 |
| | VI. | Goals and Objectives | 19 |
| | VII. | The Assessment of Learning | 22 |
| | VIII. | Instructional Considerations | 24 |
| | IX. | Media | 27 |
| | X. | The Assessment of Instruction | 29 |
| | XI. | Educational Change | 31 |

# SYLLABUS

# INSTRUCTIONAL STRATEGIES

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## INTRODUCTION

This course is designed to assist the learner in the development of skills, attitudes, and knowledge necessary to serve effectively in the position of teacher, counselor, or administrator, current or prospective.

The primary purpose of any educational system is to answer the demands of the society that supports it, both in well-trained specialists and in competent citizens. In this regard, one of the major functions of a university is the preparation of persons for service in professions. This is in accordance with its commitments to serve both individuals and society at large. Students gain professional training and the opportunity to enter rewarding forms of employment while society acquires skilled practioners to carry on the necessary endeavors crucial to its welfare. This course derives from these general functions of the university. At the conclusion of this course, enrollees will be able to (1) build and supervise courses that fit into the total curricular pattern of the junior college, and (2) translate their courses to students in a manner that maximum desired learning may be effected.

A systematic approach to instruction is the primary focus of the course. Junior college teaching is stressed, although the content is relevant to all levels of instruction. Junior colleges are primarily "teaching" institutions. All junior college personnel must, therefore, understand and be committed to student learning.

The pre-service training and the in-service development of junior college teachers in an age that is experiencing an acceleration of scientific and technological advance creates complex problems for educational leaders. The obsolescence of skills, knowledge, and competencies in the teaching profession dictates the need for continuous in-service development. And, prospective teachers need to be trained in the use of media, equipment, and instructional methodology. In short, recent technological developments have sharpened the awareness of, and the need for, educational innovations which contribute to more effective teaching.

It is fairly obvious even to the casual observer of the contemporary educational scene that a new instructional technology and an empirically based science of pedagogy are in the process of emerging. Such developments will have a drastic impact on the role of the teacher of tomorrow. At this point, a research-based approach to instruction stressing student learning (a learning-oriented system of instruction) can be developed, implemented, and fully evaluated.

The underlying theme of this course is that superior and innovative instruction, in the sense of causing student learning, is the key to institutional identity for the two-year college. The "systems approach" to instruction allows institutions and instructors to focus on and to meet the diverse needs of heterogeneous student bodies. Its salient feature is its emphasis on validated approaches to promoting teaching effectiveness in terms of predictable and measurable evidence of student learning.

This instructional system is based on the research and rationale developed by Benjamin S. Bloom and summarized in his paper "Learning for Mastery".* In effect, the methodology places primary responsibility for successful learning on the teacher rather than the student, through a specific procedure which requires him to formulate explicit definitions of learning objectives in behavioral terms, to establish systematic means, and to develop relevant assessments of progressive achievement.

By defining teaching quality in terms of measurable evidence of learning, the teacher is motivated to articulate course objectives and outlines in a manner that will direct, stimulate, and measure learning activities. The process involves the development of skills in stating course objectives in measurable terms and, relative to these objectives, of proficiency in selecting instructional media, of ability in sequencing learning experiences, and of expertise in assessing learning achievements.

The course purports to generate the development of an instructional approach adaptable to a broad spectrum of subject-matter fields; it demonstrably improves teacher-student interaction by providing a greater sense of direction, location, and progress in moving along the learning continuum. And, it emphasizes the need for maximum flexibility in relating instructional media to the diverse learning capabilities of junior college students.

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*Bloom, Benjamin S. "Learning for Mastery." UCLA Evaluation Comment, May, 1968.

## GENERAL INFORMATION

Course title: Instructional Strategies

Course number: Education 360

Course credit: 3 units

Prerequisites: Graduate standing

Course description: An introduction to junior college instructional procedures stressing the specification of instructional objectives in behavioral terms, the selection and organization of learning experiences, and the evaluation process, as they relate to the functions of the junior college and the characteristics of junior college students.

Major course requirements: Develop a self-instructional unit and a course outline.

Grading: The Instructor expects no less than 90 percent of the enrollees completing the course to reach the base criterion level specified in 80 percent of the objectives, and to construct well planned self-instructional units and course outlines. Public recognition of such mastery will be grade of "A" or its equivalent.

This syllabus* is designed to help students understand the nature and requirements of the course. Eleven units, each treating an important aspect of instruction in the junior college, comprise the course. Each unit contains its own validation, set of objectives, and list of resource materials:

1. The validation is a short statement which gives a rationale for the inclusion of the unit within the course.

2. The objectives are stated in terms of learner behaviors with conditions and standards of performance specified. The number listed after each specific objective refers to the degree of accuracy which is considered adequate for minimal achievement of that objective. The achievement of all objectives at the minimum standard of competence specified does not preclude the learning of

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*Much of the material in this syllabus is from, or based in large measure upon: Cohen, Arthur M. Syllabus: The Junior College Curriculum. Los Angeles: UCLA Graduate School of Education, 1968.

"higher order" concepts along the way. For example, it is hoped that the learner will become committed to the democratic ideal of education for each person to the level of his ability, and will gain an appreciation of the dynamics of the junior college as an educational organization. The objectives were developed and the course was arranged with these and other similar general goals in mind.

3. Resource Materials listed include readings and audiovisuals. During the time allotted for class meetings the instructor may lecture, guide class discussions, invite guests, or present audio-visual aids which he considers appropriate. He will revise "content" of the course on request or as otherwise deemed desirable so as to contribute most efficiently and effectively to the fulfillment of the objectives specified.

## BASIC REFERENCES

Cohen, Arthur M. Dateline '79: Heretical Concepts for the Community College. Beverly Hills: Glencoe Press, 1969.

Roueche, John E. and Barton R. Herrscher. Junior College Instruction. New York: Selected Academic Readings, 1970.

## GLOSSARY

APTITUDE - the amount of time required by the student to attain mastery of a learning task.

ASSESSMENT - the determination of skill, knowledge, or attitude.

BEHAVIOR - action; demonstrated ability, skill, or attitude.

COMMUNITY - the locale from which the junior college draws its students and/or its support.

COMMUNITY JUNIOR COLLEGE - a junior college organized and supported publicly for the purpose of providing a wide variety of programs for a broad range of students.

CONTENT - content as as aspect of curriculum means elements of knowledge, skills, processes, and attitudes which are selected and organized and then presented through learning experiences to the student.

CRITERION - a standard, norm, or judgment used as a basis for quantitative and qualitative comparison.

CRITERION TEST - the evaluation instrument employed to assess the degree to which the output performance of the student meets pre-determined performance objectives.

CURRICULUM - any set of courses.

GOAL - the general outcome toward which the student is directed.

INTELLIGENCE - the ability to perceive and understand relationships, such as logical, spatial, verbal, numerical, and recall of associated meanings.

ITEM ANALYSIS - any one of several methods used in test construction to determine how well a given test item discriminates among individuals differing in some characteristic.

JUNIOR COLLEGE - any educational institution offering course for students beyond high school and through the first two years of college.

LEARNING - a changed capability for, or tendency toward, acting in particular ways.

LEARNING TASKS - specific bits of knowledge, skills, and attitudes which the student has to master in order to be able to perform in the way described in the objective.

MEDIA - persons, devices, or situations intended to assist student learning.

NORMAL DISTRIBUTION CURVE - a derived curve based on the assumption that variations from the mean are by chance. It is bell-shaped in form and adopted as true because of its repeated recurrence in the frequency distributions of sets of measurements of human characteristics in psychology and education. In a normal curve, scores are distributed symmetrically about the mean.

OBJECTIVE - a statement taht describes in observable and measurable terms the specific knowledge, skill, or attitude which the student is expected to attain.

PERSEVERANCE - the time the student is willing to spend in learning.

QUALITY OF INSTRUCTION - the degree to which the presentation, explanation, and ordering of elements of the task to be learned approach the optimum for a given student.

TEACHING - the deliberate sequencing of events designed to bring about changed behavior in the learner.

Terms used in instructional objectives, as defined by Bloom (Taxonomy of Educational Objectives: Cognitive Domain):

KNOW - be able to recall data.

UNDERSTAND - comprehend, translate, explain in simple terms.

APPLY - relate sets of data to formulate or principles in a manner to approach accurate solutions.

ANALYZE - break down into relevant, component parts.

SYNTHESIZE - combine into appropriate format.

EVALUATE - apply criteria in order to form judgement; determine worth.

## LONG RANGE OBJECTIVES

1. Of the enrollees in teaching positions, within one year after completing the course, 80 percent will use a systematic approach to instruction as defined in this course.

2. Of the enrollees in teaching positions, within six months of completing the course, 80 percent will be given ratings by their supervisors superior to the average of teachers in that junior college.

3. Of the enrollees who supervise instruction, within one year of completing the course, 90 percent will incorporate some phase of "supervision by objectives" in their faculty evaluation schedules.

4. Of the enrollees in teaching positions, immediately upon completion of the course, 90 percent will accept responsibility for student learning as demonstrated by their subscription to the tenet "Teaching may be inferred only when measurable evidence of student learning is demonstrated."

5. Of the enrollees in teaching positions, immediately upon completion of the course: a) 80 percent will actively strive to implement the "processes" of the learning-oriented system of instruction as defined in this course, and b) 30 percent will actively pursue institutional changes so as to implement the "environment" factors of the learning-oriented system of instruction.

## END-OF-COURSE GOALS

1. The learner will understand the basic nature of the two-year college.

2. The learner will be able to write and utilize specific measurable instructional objectives in his own classroom teaching.

3. The learner will be able to evaluate student learning (teaching effectiveness) in terms of his stated instructional objectives.

4. The learner will be able to select and use appropriate multimedia in his instruction to better achieve course objectives.

5. The learner will be able to modify curricular approaches to allow for differential student learning rates.

6. The learner will produce self-instructional materials for students that incorporate the foregoing objectives.

7. The learner will understand the basic nature of educational change.

# I. A SYSTEMATIC APPROACH TO INSTRUCTION

Although the systems approach to instruction is a "new" concept to many practitioners in the field of education, this concept does not represent new thinking. Ralph Tyler was concepualizing such an approach to instruction as early as 1935. Shortly thereafter the military demonstrated its feasibility and effectiveness. Recently, major inroads have been made into the field of education. The systems approach involves four basic steps: 1) the specification of instructional objectives in behavioral or measurable terms; 2) the diagnostic analysis of student capabilities thru pre-assessment; 3) the optimal sequencing of course content; 4) the definition of relevant criterion referenced measures of achievement, i.e., post-assessment. These are combined in an empirical manner to produce a viable and efficient learning system. The system's proven capability of producing measurable learner achievement is its hallmark.

## Objectives

I. Goal: The learner will understand the basic nature of the systems approach to instruction.

Objective: 1. He will be able to trace the historical development of the systems approach as applied to the field of education.
100

Objective: 2. He will know the seven aspects of the systems approach as outlined in Banathy (p.22).
86

Objective: 3. He will relate the aspects of the systems approach to education circa 1970, and identify the obvious inadequacies of current educational practice relevant thereto.
86

II. Goal: The learner will understand the basic differences between a teaching-oriented system and a learning-oriented system of instruction.

Objective: 4. Given a list of processes, he will correctly categorize each as applicable to the teaching-oriented system or learning-oriented system of instruction.
90

Objective: 5. He will write a 500 word paper outlining strategies for overcoming institutional roadblocks to the installation of a learning-oriented system of instruction on a college-wide basis.
100

## Resource Materials

REQUIRED READINGS:

1. Banathy, Bela H. Instructional Systems. Palo Alto: Fearon Publishers, 1968.

* 2. Roueche, John E. and Herrscher, Barton R. "A Learning-Oriented System of Instruction." Mimeo, 1969.

SUPPLEMENTARY READINGS:

1. Lange, Phil C. "Technology, Learning, and Instruction" Audio Visual Instruction, March 1968, pp. 226-231.

2. Popham, W. James. The Teacher Empiricist. Los Angeles: Tinnon-Brown, Inc. 1965, pp. 7-20.

3. Johnson, B. Lamar. Systems Approaches to Curriculum and Instruction in the Open-Door College. JCLP Occasional Report #9. Los Angeles: UCLA Graduate School of Education, 1967.

AUDIOVISUALS:

1. Popham, W. James. "Systematic Instructional Decision-Making" (filmstrip-tape program.) Los Angeles: Vimcet Associates, 1967.

2. Popham, W. James. "A Curriculum Rationale" (filmstrip-tape program). Los Angeles: Vimcet Associates, 1969.

* NOTE: Readings designated by an asterisk (*) throughout this syllabus can be found in: Roueche, John E. and Barton R. Herrscher (eds.). Junior College Instruction. New York: Selected Academic Readings, 1970.

## II. BUILDING THE SELF-INSTRUCTIONAL UNIT

A course composed of a series of self-instructional units frees the instructor from his traditional role of lecturer, and provides him time to act as a manager, diagnostician, catalyst, tutor, leader, and to work with students individually.

### Objectives

I. Goal: The learner will design a self-instructional unit to be included in a junior college course.

Objective: He will prepare a self-instructional unit in his subject area. He will submit two copies, one of which will be returned. Guidelines for the production of the package are as follows:

100

### GUIDELINES FOR PRODUCING A SELF-INSTRUCTIONAL UNIT

Nature of the package:

Objectives for the package should be specified in behavioral terms.

Target learners should be specified (e.g., "English 1A students"); time required for completion of package should be short--possibly under 20 minutes.

Pre- and post-test items should provide practice in the behaviors to be learned.

Some measure of student attitude should be included.

The following procedure is suggested following study and completion of each Booklet in the Instructional Reorganization Series (See Resource Materials Section).

Booklet

I: Write the objectives for the self-instructional unit.

II: Write the pre-and post-tests.

III: Select the learning activity which will give the student the desired practice.

IV: Combine objectives, pre- and post-test, and instructional materials with sufficient directions so that the student can work thru the package without additional help from you!

V: Administer the self-instructional unit to one or two learners. If the objectives are not achieved, revise the package. Talking with students will help locate inadequacies in the package.

Notes should be kept regarding the development of the package, the history of its tryout, and student comments or other reasons for revisions.

## Resource Materials

REQUIRED READINGS:

1. Johnson, Stuart R. Booklet I: Specifying and Analyzing Objectives. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

2. Johnson, Stuart R. Booklet II: Measuring Attainment of Objectives. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

3. Johnson, Rita B. Booklet III: Arranging Instructional Activities. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

4. Johnson, Rita B. Booklet IV: Selecting and Designing Methods and Materials. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

5. Johnson, Rita B. Booklet V: Refining the Instructional System. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

6. Mager, Robert F. Preparing Instructional Objectives. Palto Alto: Fearon Publishers, 1962.

SUPPLEMENTARY READINGS

1. Sample self-instructional packages.

# III. THE JUNIOR COLLEGE: AN OVERVIEW

The success of the community college as a social institution dedicated to instruction will depend, in large measure, upon the success of its educational endeavors with disadvantaged students. Whether the students are labeled disadvantaged, remedial, low-achievers, developmental, non-traditional, new, marginal, probationary, deprived, special, or underpriviledged, they all have one thing in common: They simply do not fit into the mold labeled "traditional college student." They are, however, students to be found in community colleges.

## Objectives

I. Goal: The learner will understand the basic nature of the two-year college.

Objective: 1. He will be able to evaluate the open-door concept of the two-year college.
100

Objective: 2. He will be able to trace the development of higher education in the United States.
100

Objective: 3. He will be able to identify and discuss the three philosophical assumptions which underlie the concept of universal education.
100

Objective: 4. He will be able to identify the common barriers which prevent many persons from seeking higher education.
100

Objective: 5. He will be able to list the purposes ascribed to the community college.
100

Objective: 6. He will be able to identify the characteristics of "remedial students", and the qualifications needed by instructors in remedial programs.
100

Objective: 7. He will be able to build a case justifying remedial education as a function of the community college.
100

## Resource Materials

REQUIRED READINGS:

1. Lombardi, John. "The Junior College in Your Lifetime." Proceedings of Presidents Workshop. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1970.

2. Roueche, John E. Salvage, Redirection, or Custody. Washington: American Association of Junior Colleges, 1968.

SUPPLEMENTARY READINGS:

1. Blocker, C. E., R. H. Plummer, and R. C. Richardson, Jr. The Two-Year College: A Social Synthesis. New Jersey: Prentice-Hall, Inc., 1965. Chapters 2,3.

2. Cohen, Arthur M. Dateline 1979: Heretical Concepts for the Community College. Beverley Hills: Glencoe Press, 1969.

3. Collins, Charles C. Junior College Student Personnel Programs: What They Are and What They Should Be. Washington, D. C.: AAJC, 1967.

4. Cosand, Joseph P. "Philosophy of Community Junior Colleges." School and Community, LIII (November 1966), pp. 35-36, 87-91.

5. Friedman, Norman L. "Comprehensiveness and Higher Education: A Sociologist's View of Public Junior College Trends," American Association of University Professors, December, 1966, Vol. 52, 4, pp. 417-423.

6. Gleazer, Edmund J. This is the Community College. Boston: Houghton-Mifflin Company, 1968. Chapters 1 and 2.

7. Gleazer, Edmund J. An Introduction to American Junior Colleges. Washington, D. C.: AAJC, 1967. Chapter 1.

8. Havighurst, Robert J. "Social Change and the Community College," North Central Association Quarterly, Winter, 1967, Vol. 41, pp. 241-248.

9. Marsee, Stuart E. "Who Needs the Community College?" Junior College Journal. Vol. 39 (September 1968), pp. 8-10.

10. Medsker, Leland L. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Co., Inc., 1960. Chapter 1.

11. National Society for the Study of Education. The Public Junior College. Fifty-fifth Yearbook, Part I. Chicago: University of Chicago Press, 1956. Chapter IV.

12. Thornton, James W. The Community Junior College. (2nd ed.) New York: John Wiley and Sons, 1966. Chapter 3.

13. Cross, Patricia K. "Higher Education's Newest Student." Junior College Journal. Vol. 39, (September 1968), pp. 38-42.

AUDIOVISUALS:

1. Association Films. The Now Colleges. 16 mm. color-sound film. Atlanta: Association Films, Inc., 1969.

# IV. LEARNING FOR MASTERY

Bloom's paper, "Learning for Mastery" is one of the most important educational treatises of recent years. It deserves close scrutiny by all concerned with education. It is a paper of great potential for influencing views and practices in the selection of learning activities. The model clearly demonstrates that the majority of students can be expected to achieve mastery of a subject up to a high level.

## Objectives

I. Goal: The learner will have a basic understanding of Bloom's instructional model "Learning for Mastery."

Objective: 1. He will know the implications of teacher expectations regarding student achievement, i.e., the students in a class represent a normal distribution.
100

Objective: 2. He will know the theoretical concepts which underlie Bloom's instructional model.
100

Objective: 3. He will be able to design an instructional system which accommodates Bloom's five major variables of learning.
100

Objective: 3. He will be able to distinguish between the teaching-learning process and the evaluation process.
100

Objective: 4. He will know the affective consequences of mastery learning and will be able to formulate a case supporting the view that learning mastery must be both a subjective recognition by the student of his competence and a public recognition by school and society.
100

Objective: 5. After completing the unit, the learner will be more favorably disposed toward the following two tenets than he was before:
a. Most students can learn to a high level of mastery.
b. The "normal curve" has no place in education.
100

## Resource Materials

REQUIRED READINGS:

Bloom, Benjamin S. "Learning for Mastery." UCLA Evaluation Comment, May 1968.

# V. TEACHING AND LEARNING IN THE TWO-YEAR COLLEGE

Teaching is causing learning. The word "causing" may here be modified--"allowing", "stimulating", "facilitating", even "getting-out-of-the-way-of" will do--but there can be no operationally satisfactory definition of teaching which fails to include the term "learning." ...Learning is a changed capability for, or tendency toward, acting in particular ways.[1]

## Objectives

I. Goal: The learner will understand the terms "teaching" and "learning".

Objective: 1. He will be able to define, and support his definitions of, teaching and learning.
100

Objective: 2. He will be able to list the "media of teaching" and the "media of learning", and will know the differences between these "media" and the actual processes of teaching and learning.
80

II. Goal: The learner will understand the several "untenable assumptions" of college instruction as outlined by Glaser.

Objective: 3. He will be able to design a program of institutional change which accommodates the instructional practices outlined in each of the "assumptions".
100

III. Goal: The learner will understand the historically accepted concept of the natural inequality of man and its application to education.

Objective: 4. He will know the four types of evidence typically offered to prove that people are innately different in their capacity to learn, and will build a case refuting such evidence.
100

Objective: 5. After considering the three "ability models" proposed by Boyer and Walsh, he will select the one to which he personally subscribes, and state the rationale for his selection.
100

Objective: 6. He will formulate a case in support, or rejection, of the statement "Poor teaching is protected in the American educational system through the assumption that the student doesn't have the ability."
100

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1. Cohen, Arthur M. Focus on Learning: Preparing Teachers for the Two-Year College. Los Angeles: UCLA Junior College Leadership Program, 1968, pp. 24-25.

## Resource Materials

REQUIRED READINGS:


* 1. Boyer, William H. and Paul Walsh. "Are Children Born Unequal?" Saturday Review, October 19, 1968.

2. Cohen, Arthur M. & Florence Brawer. Focus on Learning: Preparing Teachers for the Two-Year College. Occasional Report 11. Los Angeles: UCLA Junior College Leadership Program, 1968, pp. 24-25.

* 3. Glaser, Robert. "Ten Untenable Assumptions of College Instruction." Educational Record. Vol. 49 (Spring 1968), pp. 154-159.


SUPPLEMENTARY READINGS:


1. Bruner, Jerome S. Toward a Theory of Instruction. Cambridge: Harvard University Press, 1966.

2. Carroll, John A. "A Model of School Learning." Teachers College Record, Vol. 64, 1963, pp. 723-733.

* 3. Congreve, Willard J. "Independent Learning." North Central Association Quarterly. 40, 1965, pp. 222-228.

* 4. Gage, N. L. "Theories of Teaching." Theories of Learning and Instruction, Sixty-third Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1964. pp. 268-285.

5. Gagne, R. M. The Conditions of Learning. New York: Holt, Rinehart & Winston, Inc., 1965.

* 6. Rogers, Carl R. "Personal Thoughts on Teaching and Learning." Merrill Palmer Quarterly, Vol. 3 (1957), pp. 241-243.

* 7. Skinner, B. F. "The Science of Learning and the Art of Teaching," Harvard Educational Review, Vol. 24, 1954.

8. Symonds, Percival M. What Education Has to Learn from Psychology. New York: Columbia University Press, 1960.

* 9. Tyler, Ralph. "The Teaching Obligation," Junior College Journal. XXX 9 (May, 1960), pp. 525-533.

# VI. GOALS AND OBJECTIVES

Objectives are the basic building blocks of the course, for through their use the instructor communicates specific expectations to his students. In this manner, direction is afforded and learning is facilitated.

## Objectives

I. Goal: The learner will be able to write goals which are appropriate for various chronological positions in the curriculum.

Objective: 1. Given a list of goals, he will note whether they are best placed at the beginning of a course, the end of a unit, the end of a course, or the end of a curriculum.

80

II. Goal: The learner will be able to write specific, measurable objectives.

Objective: 2. He will list and define in ten words or less the three criteria for specific objectives.

100

Objective: 3. Given a list of objectives, he will distinguish between those which do and those which do not meet the criteria for specific objectives.

80

Objective: 4. Given a list of objectives, he will note the reasons they fail to meet the criteria for specific objectives.

100

III. Goal: The learner will be able to apply taxonomic classifications to educational objectives.

Objective: 6. Given a list of objectives he will note whether the behavior patterns specified are primarily cognitive, affective, or psychomotor.

90

Objective: 7. Given a list of definitions, he will note whether they are descriptive of the cognitive, affective, or psychomotor domains.

90

Objective: 8. Given a list of objectives, he will note level of classification in the domain to which each belongs (cognitive, affective, psychomotor).

90

Objective: 9. Outside of class, he will write a specific objective at each classification on the cognitive and affective domains. (total: eleven (11) objectives.)

100

IV. Goal: The learner will be able to organize objectives in a logical order.

Objective: 10. Given a list of objectives, he will select the one which is prerequisite to other objectives in the course or is terminal to a course.

80

Objective: 11. Given a terminal objective and prerequisite objectives, he will arrange the prerequisite objectives in order of complexity according to the Taxonomy.

60

## Resource Materials

REQUIRED READINGS:


* 1. Cohen, Arthur M., "Defining Instructional Objectives", Original Manuscript, 1967.

* 2. Dressel, Paul. "The Meaning of a College Education." Journal of Higher Education, December 1968, pp. 481-489.

* 3. Eisner, Elliot W. "Educational Objectives: Help or Hindrance", The School Review. Vol. 75, No. 3, Autumn 1967, pp. 250-260.

* 4. Gagné, Robert M., "The Analysis of Instructional Objectives for the Design of Instruction." Teaching Machines and Programmed Learning, II. Robert Glaser, editor, NEA, 1965, pp. 21-65.

5. Johnson, Stuart R. Specifying and Analyzing Objectives. Durham, N. C.: Regional Education Laboratory for the Carolinas and Virginia, 1969.

* 6. Krathwohl, David R., "The Taxonomy of Educational Objectives-- Its Use in Curriculum Building" Defining Educational Objectives, C. M. Lindvall, editor, 1964, pp. 19-36.

* 7. Popham, W. James. "Objectives and Instruction," Instructional Objectives, W. J. Popham (ed.). Chicago: Rand McNally, 1969.


SUPPLEMENTARY READINGS:


1. Bloom, B. S. et.al. Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: Longmans, Green, 1956.

2. Cohen, Arthur M. "Teach Toward Measurable Objectives," Improving College and University Teaching. Autumn, 1966, Vol. 14, 4. Pp. 246-248.

3. Gagné, Robert. "The Implications of Instructional Objectives for Learning." In C. M. Lindvall (ed.), Defining Educational Objectives. Pittsburgh: University of Pittsburgh Press, 1969.

4. Krathwohl, D. R. et al. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc., 1964.

5. Krathwohl, D. R. The Taxonomy of Educational Objectives--It's Use in Curriculum Building. In C. M. Lindvall (ed.)., Defining Educational Objectives. Pittsburgh: University of Pittsburgh Press, 1964.

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3. Popham, W. James. "Identifying Affective Objectives." (filmstrip-tape program). Los Angeles: Vimcet Associates, 1969.

4. Popham, W. James. "Selecting Appropriate Objectives." (filmstrip-tape program). Los Angeles: Vimcet Associates, 1967.

5. Popham, W. James and Kneller, George. "Educational Objectives Debate." Tape, 1969.

# VII. THE ASSESSMENT OF LEARNING

If student learning is the goal of our educational institutions, then the assessment of learning becomes an extremely important process. It is only through such assessment that we are able to determine the success of our teaching endeavors. Mager asks, "If it's worth teaching, isn't it worth knowing if we have succeeded?[1] And we must have measurable evidence that student learning has occurred before we can infer that teaching has taken place.

In the past few years measurement experts have evolved markedly different approaches to testing practices. These approaches are at considerable variance with the customary measurement procedures historically used by educators. It is therefore imperative that those involved with the assessment of learning, and this includes most educational personnel, consider the implications of these new procedures.[2]

## Objectives

I. Goal: The learner will know the general purposes of instructional evaluation.

Objective: 1. He will be able to distinguish between formal and informal evaluations. 100

II. Goal: The learner will know the components of Wittrock's conceptualization of evaluation.

Objective: 2. He will be able to differentiate between the four components. 100

III. Goal: The learner will be able to describe the principal purposes of norm-referenced testing and criterion-referenced testing.

Objective: 3. He will be able to contrast norm-referenced to criterion-referenced approaches to testing with respect to variability, item constructions, reliability, validity, item analysis, and reporting and interpretation. 100

Objective: 4. He will be able to properly classify descriptions of measurement devices, operations, and situations as either norm-referenced or criterion-referenced. 100

Objective: 5. He will be able to analyze various goals of student evaluation, as suggested by Husek, to the point of identifying the kinds of test items needed to achieve the goals. 100

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1. Mager, Robert. Developing Attitude Toward Learning. Palo Alto: Fearon Publishers, 1968, p. 9.

2. Popham, W. James. Modern Measurement Methods (filmstrip-tape program). Instructor's Manual. Los Angeles: Vimcet Associates, 1969, p. 1.

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AUDIOVISUALS:

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Popham, W. James. "Modern Measurement Methods" (filmstrip-tape program). Los Angeles: Vimcet Associates, 1969.

# VIII. INSTRUCTIONAL CONSIDERATIONS

The teacher empiricist, or learning specialist, after charting the path of instruction (i.e., specifying behavioral objectives), must guide the students along that path. He selects learning activities that are likely to lead to the successful attainment of instructional goals; he establishes student interest in the learning activities; he provides the student with immediate feedback regarding the adequacy of responses made during the learning activities; he accommodates individual differences; and, he creates a classroom atmosphere in which the student experiences both a challenge and gratifying success in the learning endeavors undertaken.

## Objectives

I. Goal: The learner will understand the concepts of "perceived purpose", "appropriate practice", and "knowledge of results" as they apply to instruction.

Objective: 1. Given descriptions of learning situation he will identify those elements which have and those which do not have importance for the student in his relation to society.
90

Objective: 2. Given descriptions of learning situations, he will identify those elements which satisfy and those which do not satisfy the student's achievement motive.
90

Objective: 3. Given instructional objectives, he will write learning activities which are quivalent practice, analogous practice, and pre-requisite tasks for the objectives.
90

Objective: 4. Given descriptions of learning situations, he will discriminate between immediate and less immediate reinforcement, appropriate and inappropriate response. He will use as a means of discrimination the objectives, effective and ineffective spacing, and those situations in which freedom from failure and expectation of threat is present or absent.
80

II. Goal: For different types of instructional techniques, e.g., lecture, discussion, etc., the learner will be able to choose certain procedures which are appropriate.

Objective: 5. Given a specific instructional objective, he should choose whether a discussion, lecture or demonstration approach would be more suitable for achieving the objective.
100

III. Goal: The learner will understand the importance of developing in the student "subject matter approach tendencies", or a positive attitude toward learning.

Objective: 6. He will know the various sources of influence on behavior, and how they operate in developing subject matter approach tendencies in students.
90

Objective: 7. He will apply "aversives" and "positives" to classroom situations, and note ways in which positives can be maximized and aversives minimized.
90

Objective: 8. He will devise a strategy for assessing success in influencing subject matter approach tendencies.
100

IV. Goal: The learner will understand "the psychology of expectation" as it applies to the classroom.

Objective: 9. He will be able to cite research findings on the subject of teacher expectation and student achievement.
100

Objective: 10. He will formulate a case for (or against) the concept that teacher expectation leading to selectivity of attention, perception, response, interpersonal warmth, and encouragement, might actually lead to superior student learning and performance.
100

## Resource Materials

REQUIRED READINGS

*1. Glaser, Robert. "The Design of Instruction", NSSE Yearbook, LXV (Part II), 1966, pp. 215-242.

2. Gumpert, Peter and Carol Gumpert. "The Teacher as Pygmalion: Comments on the Psychology of Expectation." Urban Review 3(1), September 1968.

3. Johnson, Rita B. Arranging Instructional Activities. Durham, N. C.: RELCV, 1969.

4. Mager, Robert F. Developing Attitude Toward Learning. Palo Alto: Fearon Publishers, 1968.

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SUPPLEMENTARY READINGS

1. Brown, James and James Thornton. College Teaching. New York: McGraw-Hill Book Company, 1963, Chapter 6.

*2. Dressel, Paul L., "The Planning of Instruction," Improving College and University Teaching, 1966, 14 (2), pp. 69-76.

3. Farber, Jerry. "The Student as Nigger." This Magazine is About Schools. (Date unavailable).

*4. Henderson, Algo D., "The Design of Superior Courses," Improving College and University Teaching, 1962, 13 (2), pp. 106-109.

5. McKeachie, W. J. "Research on Teaching at the College and University Level." Gage, N. L. (ed.), Handbook of Research on Teaching. Chicago: Rand McNally, 1963. Chapter 23.

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1. Popham, W. James. "Perceived Purpose" (filmstrip-tape program). Los Angeles: Vimcet Associates, 1967.

2. Popham, W. James. "Appropriate Practice" (filmstrip-tape program). Los Angeles: Vimcet Associates, 1967.

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# IX. MEDIA

All materials and methods are mediational influences on learning and should be introduced in sequences most likely to enhance learning. Any controllable influence intervening between the instructor's communication of objectives and his assessment of their attainment may be considered a medium of instruction. The selection of appropriate media from all that are available is an important task.

## Objectives

I. Goal: The learner will understand the types and functions of instructional media.

Objective: 1. He will know the various types of instructional media.
100

Objective: 2. He will be able to fit appropriate media into various instructional sequences.
100

Objective: 3. He will be able to analyze media in terms of their best functions.
100

II. Goal: The learner will be able to select appropriate instructional media.

Objective: 4. Given a list of media, he will note the most useful and appropriate applications of each.
80

Objective: 5. Given a list of objectives, he will select media to use in a sequence most likely to lead students to fulfillment of the objectives.
80

Objective: 6. Given a paragraph descriptive of a situation in which students failed to meet criteria of objectives, he will select alternate media which will be more likely to aid learning.
90

III. Goal: The learner will be able to apply media to self-instructional printed packages.

Objective: 7. Given the narrative of a self-instructional printed package, he will, by analyzing the nouns and adjectives used, choose appropriate instructional media.
100

## Resource Materials

REQUIRED READINGS

1. Johnson, Rita B. Selecting and Designing Methods and Materials. Durham, N. C.: RELCV, 1969.

*2. Kapfer, Philip G. "Practical Approaches to Individualizing Instruction." Educational Screen and A-V Guide 47(5), 1968.

*3. Kaufman, Roger A. "The Teacher and Technology". Audiovisual Instruction 13(2), 1968.

SUPPLEMENTARY READINGS

1. Briggs, Leslie, et. al. Instructional Media. Pittsburgh: AIR, 1967.

2. Brown, James, and James Thornton. College Teaching. New York: McGraw-Hill Book Co., 1963. Chapter 7.

3. Brown, James, and James Thronton (eds), New Media and College Teaching. Washington, D. C.: AAHE, 1968.

4. Culkin, S. J., and John M. "A Schoolman's Guide to Marshall McLuhan," Saturday Review, (March 18, 1967)pp. 51-72.

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6. Luskin, Bernard. "Computer Assisted Instruction: A Dream and a Reality." Mimeo, 1969.

7. Sample Self-Instructional Printed Packages.

# X. THE ASSESSMENT OF INSTRUCTION

Each course within the curriculum needs regular inspection to insure that it continues to be appropriate. The assessment of instruction is a necessary, continuing process. And, since students view the instructor in his day-to-day teaching activities, student evaluations, when carefully and properly handled, provide the best criterion of quality of instruction.

## Objectives

I. Goal: The learner will understand the basic nature of evaluation of instruction.

Objective: 1. He will outline, in writing, a set of assumptions underlying instructional evaluation on the order of those suggested by Sorrenson.
80

Objective: 2. He will list the main functions to be performed by the professional evaluator, as proposed by Sorrenson.
100

II. Goal: The learner will understand the need for, and various approaches to, the evaluation of instructional effectiveness.

Objective: 3. He will formulate a case for (or against) student evaluations of faculty as an important aspect in the evaluation of instructional quality, and will state the rationale for the position taken.
100

Objective: 4. He will formulate a case in support of the tenet: Student achievement of learning objectives is the main criterion on which studies of faculty and of instructional effect should be based.
100

Objective: 5. He will develop a set of faculty evaluation criteria, and support his choice of criteria on at least two bases, including (1) relevance to good teaching, and (2) measurability.
100

III. Goal: The learner will understand the approach to faculty evaluation which McNeil calls "Supervision by Objectives."

Objective: 6. He will know the two basic assumptions underlying supervision by objectives, and the form and process of this approach to assessing instructional effectiveness.
100

## Resource Materials

REQUIRED READINGS

1. Boyer, Marcia. "Teacher Evaluation: Toward Improving Instruction." Junior College Research Review 4(5), January, 1970.

*2. McNeil, John D. "Antidote to a School Scandal." The Educational Forum, November. 1966.

*3. Sorrenson, Garth. "A New Role in Education: The Evaluator." UCLA Evaluation Comment 1(1), January 1968.

SUPPLEMENTARY READINGS

1. Baker, Robert L. "Curriculum Evaluation." Review of Educational Research 39, 1969.

2. Brown, James and James Thornton. College Teaching. New York: McGraw-Hill Book Company, 1963. Pp. 246-252.

3. Cronbach, Lee J. "Course Improvement through Evaluation." Teachers College Record, May, 1963, pp. 672-683.

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5. Gagné, Robert M. "Curriculum Research and the Promotion of Learning." Tyler, Ralph, et.al. Perspectives of Curriculum Evaluation. Chicago: Rand McNally, 1967.

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AUDIOVISUALS

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# XI. EDUCATIONAL CHANGE

Man is the only animal which forces change on himself; thus, we need to know what change is all about and we need to guide our course of change. Three ingredients of change need to be understood if we are to innovate constructively in higher education. First, there must be a conceptual, perhaps philosophical, understanding of how guided change takes place. Those seeking improvement must know how to go about it. Second, there must be a realistic appreciation of what research and development involve. Colleges and universities have little understanding of this matter. Finally, the institutional prerequisites must be at hand. Certain elements must be present for effective change to take place and pay off.[1]

The future of the schools depends in large part on whether they can overcome, in educational policy and practice, what is frequently an extreme conservatism and a strong resistance to change. This depends in turn on whether they can develop a genuine openness to experiment and innovation. This is difficult because the conservatism of the schools has been a natural response to society's expectation that they reflect dominant social opinion and they perform an essentially conservative function.[2]

## Objectives

I. Goal: The learner will understand the basic nature of educational change.

Objective: 1. He will list and briefly discuss the three types of strategies for effecting change as formulated by Chin.

100

Objective: 2. He will write a paper of 250 words on the topic of teacher resistance to instructional change.

100

Objective: 3. Given a list of educational innovations, he will correctly categorize them according to Howsam's categories of educational innovations in terms of the extent to which modification of teacher behavior is required.

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1. Bolman, F. deW. "Problems of Change and Changing Problems." Educational Researcher, Vol. XX, No. 10, 1969, pp. 2-3.

2. Committee for Economic Development. Innovation in Education: New Directions for the American School. New York: CED, 1968, p. 14.

Objective: 4. He will be able to discuss the role of research and evaluation as prerequisites to forming sound programs of change in two-year colleges.
100

II. Goal: The learner will understand the nature and process of educational development.

Objective: 4. Given ten elements of the development process in education, he will correctly order the elements.
100

III. Goal: The learner will understand the nature and basic directions of the educational reform movement of recent years.

Objective: 5. He will describe the various innovative ideas and concepts pertaining to the conduct of education developed during the past 20 years, as outlined by Goodlad.
80

Objective: 6. He will relate innovative concepts to the "state of the schools" today as outlined by Goodlad, and will describe significant efforts being undertaken by various national organizations and government agencies to improve education.
80

## Resource Materials

REQUIRED READINGS:


* 1. Chin, Robert. "Basic Strategies and Procedures in Effecting Change," in Planning and Effecting Needed Changes in Education. Denver: Designing Education for the Future, 1967. Pp. 39-64.

2. Goodlad, John I. "Educational Change: A Strategy for Study and Action." National Elementary Principal, December 1968.

* 3. Howsam, Robert B. "Effecting Needed Changes in Education," in Planning and Effecting Needed Changes in Education. Denver: Designing Education for the Future, 1967. Pp. 65-88.

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2. Innovation In Education: New Directions for the American School. New York: Committee for Economic Development, 1968.

* 3. Lombardi, John. "The Open-Door College: A Commitment to Change." Systems Approaches to Curriculum and Instruction in the Open Door College. Occasional Report 9, U.C.L.A. Junior College Leadership Program, 1967. Pp. 9-16.

4. McClelland, William A. "The Process of Effecting Change". Strategy for Change in the Junior College. Washington: AAJC, 1969.

* 5. Bright, R. Louis. "The Place of Technology in Educational Change." Audiovisual Instruction 12(4), 1967, pp. 340-343.